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AUTHOR Tang, Thomas Li-Ping
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ABSTRACT

A hypothetical organization chart was adopted to examine the relative worth of five positions and pay differentials as a function of rater's sex, money ethic endorsement (belief that money is good), and job incumbent's sex. The study explored the "Matthew Effect," the tendency of people to be willing to pay more for the highest position and pay less for the lowest positions. Study participants included 95 nursing administrators and nurses and 110 advanced students in compensation, psychology, and business classes at a large regional state university. Forty-seven of the students were full-time employees and 34 of the students were part-time employees. Results showed that job incumbent's sex has no impact on pay allocations. Significant two-way interaction effects between subject's sex and money ethic endorsement were found. Further analyses showed that men with high money ethic endorsement allocated significantly more money to the highest position and significantly less money to the lowest positions than did those with low money ethic endorsement. Women's allocations of money, however, were not affected by their endorsement of the money ethic. Thus, men's allocation of position worth supports the Matthew Effect. (Contains 43 references.) (Author/KC)

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Pay Differentials as a Function of Rater's Sex, Money Ethic, and Job Incumbent's Sex: A Test of the Matthew Effect

Thomas Li-Ping Tang*
Department of Management and Marketing, College of Business
Middle Tennessee State University,
Murfreesboro, TN 37132, USA

Running head: SEX AND MONEY

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* Tel: (615) 898-2055, Fax: (615) 898-5308, E-mail: ttang@mtsu.edu.

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Abstract

A hypothetical organization chart was adopted to examine the relative worth of five positions and pay differentials as a function of rater's sex, Money Ethic endorsement, and job incumbent's sex. Results show that job incumbent's sex has no impact on pay allocations in the present study. Significant two-way interaction effects between subject's sex and Money Ethic endorsement were found. Further analyses showed that men with high Money Ethic endorsement allocated significantly more money to the highest position and significantly less money to the lowest positions than did those with low Money Ethic endorsement. However, women's allocations of money were not affected by their endorsement of the Money Ethic. Thus, men's allocation of position worth supports the Matthew Effect.

Key words: Position Worth, Pay Differentials, Money Ethic, Sex

Pay Differentials as a Function of Rater's Sex, Money Ethic, and Job Incumbent's Sex: A Test of the Matthew Effect

In 1992, Thomas F. First, Jr., chairman and chief executive officer (CEO) of HCA-Hospital Corp. of America and the highest-paid CEO in the United States, brought in $127 million (Business Week, 1993). At the same time, the average pay figures for workers, teachers, and engineers have been $24,411, $34,098, and $58,240, respectively. Using these three average pay figures as the reference points, Mr. First's compensation is roughly 5,203 times the salary of the average worker, 3,725 times the salary of the average teacher, and 2,181 times the salary of the average engineer (Tang, Tang, & Tang, 1995).

Moreover, for the first several months of 1992, American companies have laid off about 2,600 workers a day, while American top executives' base pay has increased about 6% to $690,000. American people can't help but notice the sharp contrast between CEO pay and a growing number of layoffs, wage cuts, and plant closings. In other words, the wealthiest Americans have made the greatest gains, while the poorest citizens and the middle class have lost ground. CEOs in large U.S. corporations are now lining their pockets at the expense of everyone else (Brownstein & Panner, 1992).

Gabris and Mitchell (1988) borrow a quote from the Apostle Matthew in the Bible (Matthew 13: 12) and suggested the Matthew Effect in compensation: "For to him who has shall be given, and he shall have abundance; but form him who does not have, even that

which he has shall be taken away". "According to the Matthew Effect, merit increases are frequent and plentiful for good performers. But, poor to average performers suffer because money is taken from them to pay large merit increases to the good performers" (Heneman, 1992, p. 55). Thus, the Matthew Effect may be applied to performance appraisal and merit pay. Following this interesting line of reasoning (the Matthew Effect), for those who have (power, authority, and "money", in particular), they shall be given more and shall have abundance.

It appears that the CEO pay in the United States can be explained, in part, by the Matthew Effect. The common reaction is that executive compensation is not fair. Many people may have seriously questioned both the procedural justice and the distributive justice of CEO pay. Faced with public outrage, the Securities and Exchange Commission (SEC) chairman Richard Breeden unveiled a set of reforms that will make corporate boards think twice before handing out multimillion-dollar pay-checks to top executives (Time, 1992). Under the SEC's plan, shareholders who own $1,000 or 1 percent of a company's stock can insert a proposal in a firm's proxy statement that calls for a vote on an executive's compensation package. However, "it is surprising that so little is known about employee perceptions of the equity of pay differentials among jobs" (Milkovich & Newman, 1990, p. 34).

The Present Study

The pay differential (ratio), **irrespective of job content or function**, is defined as the salary at one level divided by the salary at the next lower level. Pay differential, a very important

aspect of job evaluation, is a reflection of the relative worth of these positions to the organization (Mahoney, 1979; Simon, 1957) and is not related to the individuals or "job incumbents".

The major purpose of this exploratory study was to examine the pay differentials as a function of rater's sex, attitudes toward money (as measured by the Money Ethic Scale [MES] Tang, 1992b), and job incumbent's sex in a hypothetical organization. First, until recently, there was a considerable paucity of psychological studies on money beliefs and work-related behaviors (Furnham, 1984; Tang, 1993). People's attitudes toward money as measured by the Short Money Ethic Scale (Tang, 1992a, 1992b, 1993) will be employed in this research.

Second, subjects' sex may have a significant impact on their attitudes toward money and work-related values (Furnham, 1984; Tang, 1992b). Therefore, the major purpose of the present study is to ascertain the interaction between rater's sex and Money Ethic endorsement on the allocation of position worth.

Third, based on the present review of the CEO pay and the compensation literature, many people in our society feel that CEO pay is not fair. Therefore, this investigation tries to ascertain people's perceptions of "deserved pay" of several positions in a given situation.

Fourth, women tend to rate working with people, being helpful to others, and being creative as more important than do men. Women rate social needs higher than do men, but rate esteem needs lower (Lawler, 1971). "Pay should be less important for women because it is not highly instrumental for the satisfaction of needs they rank

high (e.g., social), while it is instrumental for the satisfaction of needs men rank high (e.g., esteem)" (Lawler, 1971, p. 47).

Paying employees equally may create a harmonious work environment and satisfy people's social needs (i.e., the egalitarian approach). On the other hand, according to Heneman (1992), not all employees favor pay increases allocated on the basis of performance. "Males", white-collar employees, high performers, achievement-oriented employees and those who already work under a merit plan tend to favor merit pay (i.e., the equity approach)(Heneman, 1992). Following these arguments, it stands to reason that females are more concerned about "egalitarian" outcomes than males, whereas males are more concerned about "equity" than females.

I argue that the Matthew Effect will exist across positions in an organization: People will be willing to pay more for the highest position and pay less for the lowest positions. Different pay preferences may exist for males and females. People who value money may differ from those who do not (Tang, 1992b). The major purpose of this investigation is to ascertain the interaction effects between participants' sex and attitudes toward money on position worth evaluations. More specifically, the Matthew Effect will be the strongest for those males who value money and who strongly endorse the Money Ethic. Finally, the effect of job incumbent's sex will be explored.

Organizational Hierarchy and Pay Differential

Organizations use compensation to attract, retain, and motivate employees and achieve business objectives (Gomez-Mejia

Balkin, 1992; Milkovich & Newman, 1990). The compensation of the CEO, C, can be expressed as $C = A\ b^{L-1}$, where A is the salary for management trainees, b is the pay differential between hierarchical levels, and L is the number of levels in the organization (Mahoney, 1979).

It has been recommended that the ratio for the chief executives and the second highest paid position should be 1.37 to 1.41, whereas the ratio for the second and the third position should be 1.21 to 1.23 (Fox, 1974; Patton, 1951). Similar ratios have been reported by Mahoney (1979) using Kuethe and Levenson's (1964) data (1.72 and 1.47), Mahoney (1979) (1.56 and 1.37 for business students and 1.53 and 1.31 for compensation administrators), Finkin (1979) (1.39 and 1.38), and Jaques (1965) (1.33 for management and 1.25 for entry level).

Mahoney concluded that a compensation differential of approximately 30% is considered appropriate for the higher of two managerial levels. This ratio may vary from one organization to another and has been reported to be reasonably stable over time.

Tang et al. (1995) examined pay differentials of CEOs at 190 private colleges (presidents) and the highest-paid professors in three types of institutions and found that the total compensation differentials (pay and benefits combined) for the top two jobs were .75 for Research Institutions, .92 for Doctorate Granting I Institutions, and 1.35 for Liberal-Arts Colleges. The low compensation differential for major Research Institutions is an exception due to several highly-paid superstars at Research

Institutions (e.g., Dr. Wayne Isom, professor of cardiothoracic surgery at Cornell University, made $1,770,730 in 1990-1991).

Attitudes Toward Money

People attitudes toward money are learned or affected by their primary and secondary socialization process and their parents' income, education, social class, beliefs, child-rearing practices, and monetary habits (Furnham, 1984). Attitudes toward money are established fairly early in childhood and maintained in adult life (Kirkcaldy & Furnham, 1993). The potent predictor of "the importance attached to money" is the motive to outperform others, i.e., competitiveness (Kirkcaldy & Furnham, 1993). The meaning of money is "in the eye of the beholder" (McClelland, 1967, p. 10). To some, money is a motivator (e.g., Lawler, 1981), to others, money is a hygiene factor (Herzberg, Mausner, & Snyderman, 1959). Attitudes toward money can be considered as their "frame of reference" in which they examine their everyday lives (Tang, 1992b, p. 201).

Tang (1992b, 1993) has developed a Money Ethic Scale (MES). Six factors are identified. More recently, a short 12-item Money Ethic Scale has been developed based on a sample of 740 subjects (Tang, 1992a). People with high Money Ethic scores (high MES) tend to think that (1) money is good, not evil (an affective component), (2) money represents one's success (a cognitive component), and (3) they budget their money well (a behavioral component). Those who endorsed the Money Ethic tended to have high economic values, low religious values, high Type A behavior patterns, to be older, to have low pay satisfaction, and to be highly political. Tang (1995)

found that workers with low intrinsic job satisfaction and high Money Ethic endorsement have the highest withdrawal cognitions and actual turnover behavior 18 months later. The Short Money Ethic Scale has good reliability and construct validity.

Rater's Sex and Money Ethic Endorsement

Based on the attitude-behavior consistency literature, the relationship between attitude and behavior can be improved by measuring both concepts at the same specific level (cf. Ajzen & Fishbein, 1977; Tang & Baumeister, 1984). It can be argued that people's attitudes toward money will have a significant impact on their allocation of position worth evaluations because both attitudes and behavior tendencies are related to the same domain: Money.

Sex and Class Differences. Arvey, Passino, and Lounsbury (1977) found that female analysts gave marginally but consistently lower PAQ scores to the job regardless of the job gender. Brenner, Tomkiewicz, and Schein (1989) found that male middle managers still adhere to a male managerial stereotype, while female middle managers do not. Thus, the characteristics of the rater in pay-related issues should be investigated. Females tend to budget their money carefully (Tang, 1992b) and are more conservative than males (Furnham, 1984). Low income people tend to budget their money more carefully than high income people (Tang, 1992b).

Values and Differentials. In a study of values and judgments of wage differentials, Dickinson (1991) found some support for the notion that value systems determine opinions. She argued that people in favor of large differentials (associated with capitalism

and incentives for individual striving) would place higher priority on material states and competitive behavior compared with people in favor of smaller wage differentials who would place higher priority on non-material states and caring behavior.

The Matthew Effect. The Matthew Effect provides a very general statement about increasing inequalities on the basis of those who have and have not and supports the "equity" or "merit" approach (not the egalitarian approach) in compensation. In the present study, the Matthew Effect was examined and operationally defined as the amount of money (deserved pay) allocated to the highest and lowest positions in a hypothetical organizational chart. The independent variables investigated were participants' sex and Money Ethic endorsement. Based on suggestions reviewed in the present paper, it appears that when allocating money to different positions, men who value money highly (high endorsement of the Money Ethic) may have a strong preference to reward those who have the highest position and to punish those who have the lowest positions, while no significant differences for women may be found.

Hypothesis 1: Male participants with high endorsement of the Money Ethic will be likely to allocate more money to those who have the highest position and less money to those who have the lowest positions than will their low Money Ethic counterparts, while no significant differences between high and low endorsement of the Money Ethic will be found for female participants.

Job Incumbent's Sex

Gender and pay-related issues are increasingly important to the management. First, the Equal Pay Act of 1963 and Title VII of the Civil Rights Act of 1964 prohibit pay discrimination based on gender. Second, advocates of comparable worth have argued that jobs that are of similar "worth" should be paid similarly (Arvey, 1986). Third, many females are entering the labor force and the white male share of the labor force will drop from 48.9% in 1976 to 39.4% by the year 2000 according to the U.S. Labor Department. The comparable worth literature focuses on the "gender" of the job incumbent and the "value" of the job. Unfair treatments exist if a job performed by a female incumbent has lower values (position worth) than a comparable job performed by a male.

Women are also entering more male-dominated jobs which may reduce possible pay differences between men and women due to occupational attainment (Subich, Barrett, Doverspike, & Alexander, 1989). The highest paying fields continue to be more resistant to sex desegregation. There are three possible sources of sex-related bias in pay-related issues: (1) Direct bias, female-dominated jobs (Krefting, Berger, & Wallace, 1978), (2) indirect bias, knowledge of discriminatory current wage, and (3) rater's sex bias (cf. Schwab & Grams, 1985).

It has been found that the job incumbent's sex has no influence on the results of job evaluation (Grams & Schwab, 1985), pay rates for jobs (Rynes, Weber, & Milkovich, 1989), and the Position Analysis Questionnaire (PAQ) scores (Arvey et al., 1977). As discussed earlier, pay differential (ratio) is related to job

evaluation and should not be related to job incumbent's sex. Based on these suggestions, it is predicted that job incumbent's sex should have very little impact, if any, on pay allocations in the present study.

Method

Participants

The first sample of participants was recruited from a group of nursing administrators, RNs, and LPNs attending professional seminars in the Southeastern United States. Ninety-five completed questionnaires (92 females, 1 male, 2 missing data) were obtained with a return rate of 79.2%. In this sample, 76 females and 1 male were full-time employees, 8 were part-time employees.

Students were recruited from advanced undergraduate and graduate compensation, psychology, business, and MBA classes of a regional state university with more than 17,000 students in the Southeastern United States. One hundred and ten (110) surveys (66 females, 42 males, 2 missing data) were obtained (return rate = 82.5%). In this sample, 30 females and 17 males were full-time employees, 20 females and 14 males were part-time workers. The majority of these students (n = 81, 73.64%) had some "work experience" (29 missing data). Participants were grouped into three categories (sex groups): (1) female employees, (2) female students, and (3) male students. The demographic variables of the participants are presented in Table 1.

Measures

The Money Ethic Scale (MES). People's attitudes toward money were measured by the short 12-item Money Ethic Scale (Tang, 1992a).

The Money Ethic Scale has reasonable reliability and validity data (Tang, 1992a, 1992b, 1993). A 7-point Likert scale was adopted. Some sample items are listed as follows: "Money is a symbol of success." "I budget my money very well." "Money is evil." The sum of these 12 items was calculated and used. Two items which related to "money is evil" were reverse scored.

Job Incumbent's Sex. In comparable worth procedures, female-dominated jobs are typically defined as jobs in which 70% or more of the incumbents are female (Arvey, 1986). The job incumbent's sex was identified for these 6 positions to create four separate forms (charts): (1) male-dominated jobs (5 male positions), (2) sex-neutral jobs (4 female positions), (3) sex-neutral jobs (4 male positions), and (4) female-dominated jobs (5 female positions). For example, for female-dominated jobs, only position E was labeled as "M" (male) (cf. Figure 1). This was done very systematically for both female- and male-dominated jobs. Job incumbent's sex was manipulated as an independent variable.

Position Worth. A hypothetical organization chart with six positions was adopted for the present study (cf. Mahoney, 1979). These six positions were arranged with three echelons in that both B and C (second level) reported to the highest position A. Further, position B has three subordinates (D, E, and G) and has a preassigned salary of $20,000. The rationale for this salary figure is provided as follows: This preassigned salary figure for position B was $10,000 in Mahoney's (1979) original study. Due to inflation and changes for more than a decade, this figure has been changed from $10,000 $20,000. This preassigned salary of

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$20,000 was very close to the income level of the nursing sample ($24,844.3) and the student sample ($18,460.3) and considered appropriate and realistic for subjects of the present study. The letter "F" was omitted in labeling these positions to avoid confusion. Each participant was randomly assigned to receive only one of the four charts. The participants were told that:

> Please indicate the annual salary for each of these jobs by writing a number in each box. That is, if you were a personnel manager or the president of the organization, how much are you willing to pay for these jobs?

The judgments of deserved pay for positions A, C, D, E, and G (i.e., dependent variables) were obtained. Further, the pay differential (ratio) between the two adjacent levels was calculated for each position. For example, ratio A was calculated using the position worth of A divided by 20,000. In the present study, Ratio C was calculated using position worth of C divided by 20,000 (i.e., using position B as a reference point). Ratios D, E, and G were calculated using 20,000 divided by the worth of D, E, and G, respectively. Finally, the top/bottom pay differential was also calculated (A/((D + E + G)/3)).

Results

As predicted, no differences in incumbent sex were found for Positions A (F (3, 165) = .38, p = .77), C (F (3, 165) = .32, p = .81), D (F (3, 165) = .43, p = .73), E (F (3, 165) = .56, p = .64), and G (F (3, 165) = .48, p = .70). Thus, all four forms (charts)(A, B, C, and D) were combined in subsequent data analyses.

These results support the notion that job incumbent's sex is irrelevant in the context of perceived pay and job evaluation.

Participants were divided into high or low groups based on a median split of the Money Ethic (MES) scores. The two independent variables were the participant's sex groups (female employees, female students, and male students) and their endorsement of the Money Ethic (high vs. low MES). The dependent variables were participants' allocated position worth for 5 positions. Data were analyzed using 3 x 2 (Groups x MES) ANOVAs.

The results of these ANOVAs showed that the main effects of sex groups and MES did not reach significance. The two-way interaction effects between sex and MES on positions A and C were not significant. However, the same interaction effects on positions D [F (2, 161) = 5.66, p = .004, omega squared = .052], E [F (2, 161) = 5.91, p = .003, omega squared = .055], and G [F (2, 161) = 6.63, p = .002, omega squared = .063] were significant. The means of all five interaction effects as expressed in position worth and pay differential (ratio) are presented in Table 2.

Insert Tables 1, 2, and 3, and Figure 1 about here

Sex and Attitudes Toward Money (MES)

The major purpose of this study is to ascertain the interaction effect between participants' sex and the endorsement of the Money Ethic on position worth. It was hypothesized that male participants with high endorsement of the Money Ethic will allocate more money to those who have the higher position and less money to

those who have the lowest positions than will their low Money Ethic counterparts, while no significant differences will be found for female participants. The results of the Scheffé test for familywise contracts showed that for position D, the differences between high MES and low MES subjects on position worth was not significant for female employees ($F = 2.23$, $p > .05$) and for female students ($F = 1.55$, $p > .05$), but was significant for male students ($F = 9.79$, $p < .05$). That is, male students with high value toward money tended to offer lower pay to Position D ($14,050) than male students without ($16,240).

The differences between female employees, female students, and male students were not significant for either high MES or low MES participants. The pattern of results for ratios E and G was the same (see Table 2). The present findings suggest that male students who have high endorsement of the Money Ethic tend to allocate less money (value) to the lowest positions in the hierarchy, whereas those who have low MES scores tend to pay these same positions more.

Although the two-way interaction effect between sex groups and Money Ethic for Position A was not significant, further analyses were performed due to the specific focus of the present study. The results of the Scheffé test showed that male students who endorsed the Money Ethic tended to assign a significantly higher position worth to Position A ($39,800) than those who did not ($32,710) ($F = 7.23$, $p < .05$).

The results of the present study show that male college students are significantly different from female college students

and female employees. For these male students, if they value money highly (high Money Ethic endorsement), then they will be very generous to the highest position (Position A) and very thrifty or stingy to the lowest positions (Positions D, E, and G) than their counterparts. No significant differences were found for female subjects (employees and students).

Top/Bottom Pay Differential

The overall pay differential (top/bottom) was also investigated by looking at the position worth of Position A and Positions D, E, and G. In a further two-way ANCOVA controlling age, education, and the four forms (charts) used, the interaction effect between sex groups and Money Ethic reached marginal significance (F (2, 157) = 3.04, p = .051). Further analysis using the Scheffé test showed that for male students, high MES participants had significantly higher pay differentials (2.96) than those low MES subjects (2.04) (F = 10.34, p < .05). Other results failed to reach significance.

These results suggest that male participants with high endorsement of the Money Ethic create a significantly larger pay differential than those male subjects with low endorsement of the Money Ethic. Further, no significant differences have been found for female participants, either employees or students. Therefore, it appears that the Matthew Effect is supported for male students with high values toward money in the present study. They tend to rob Peter (the lowest positions) to pay Paul (the highest position). Thus, Hypothesis 1 was supported by present data.

Discussion

When allocating money to different positions, men who value money highly (high endorsement of the Money Ethic) have a strong preference to reward those who have the highest position and to offer very little value to those who have the lowest positions than those who do not, while no significant differences for women (female employees and female students) are found. For men with positive attitudes toward money, those who have power and authority deserve to have more money than those who do not, which supports the Matthew Effect (Dickinson, 1991; Gabris & Mitchell, 1988).

The present findings suggest that people's attitudes toward money as measured by the Money Ethic Scale and their own sex have a significant impact on their allocation of position worth. These results support the attitude-behavior consistency model in that people's attitudes toward money will be related to their money-related beliefs, behaviors, and compensation decisions, at least for the present hypothesized task. The Money Ethic endorsement should be explored systematically in future studies and in natural conditions.

It is speculated, first, that male students are more concerned about material goods, possessions, and money than their female counterparts. Men have higher aspirations concerning their pay than women (Major, McFarlin, & Gagnon, 1984; Milkovich & Newman, 1993). However, other researchers found no significant differences between males and females in materialism measures (Belk, 1985; Richins & Dawson, 1992). Second, popular magazines publish salary

figures of top celebrities regularly. Thus, people are aware of how big stars score in the society.

For example, in basketball, Michael Jordan made $926 per point in 1991; while in football, Joe Montana made $12,461 per completion (Inside Sports, 1991). In the automobile industry, Lee Iacocca made $4.5 million in 1991 (McCarroll, 1992). In 1993, the highest-paid, Michael Eisner of Walt Disney, made $203,010,590 (Business Week, 1994). These people's pay is significantly higher than "the average Joe" in the society, creating a significant pay differential. It is possible that men may have used these male superstars' pay as a reference point. Thereby, due to the availability of these salary data, men may have adjusted their perceptions in the upward direction concerning the right amount of salary differentials for people at the top of the organizational hierarchy. Few female role models are available in the society. Females' judgments of position worth are not affected by their attitudes toward money. Future research may test this hypothesis directly.

It is possible that the participants of the present study may have identified themselves with the top position in an organization. Top executives' compensation reflects power, social respectability, influence, and social rankings (Kuethe & Levenson, 1964; Lawler, 1981). It should be pointed out that Position A's power, authority, and related characteristics (Figure 1) are not clearly identified in the present study. The participants still feel comfortable offering more money to top executives due to their legitimate, reward, coercive, referent, and expert power.

Further, top executives may use all their power and authority in their positions. Due to this expectation and "norms of reciprocity", people may expect top executives to offer rewards and benefits to others in return. Further, the compensation of outside directors also affect CEOs' pay. Milkovich and Newman (1990) stated that for every $100,000 more made by these directors, CEOs were paid $51,000 more. CEOs usually serve on each other's board in deciding their peer CEO's compensation. Thus, apparently altruistic behaviors are really egoistically motivated which can be labeled as reciprocal altruism (Belk, 1985).

Males with higher scores on the Money Ethic Scale tend to be more conservative toward low-level employees and allocate significantly less money to lower-level workers than males with low scores on the scale. Workers in the lowest positions may have only limited power and authority. Thus, the participants may "feel free" to allocate little money to these positions based on their own personal values and perceptions (cf. Tang & Baumeister, 1984). It appears that men with positive attitudes toward money tend to be "thrifty" or "stingy" when they allocate money to lower-level subordinates and very "generous" to top-level executives. These results seem to the support the Matthew Effect. This is not the case for females. Thus, the present findings seem to support the typical stereotypes of males and females (Brenner et al., 1989). Women may have stronger preference for "egalitarian philosophy" and "distributive justice" than men, whereas men strongly favor "equity" and "merit" pay and create the Matthew Effect.

As suggested in the literature, CEOs' pay depends on the salary of the entry level, pay differential, and the number of levels in the organizational hierarchy. Further, more egalitarian structures would have fewer levels and smaller differentials between adjacent levels and between the highest CEO and lowest paid workers (Milkovich & Newman, 1990).

Due to global competition, downsizing, and the adaptation of Japanese management style, many American corporations and business units (such as GM's Saturn) and Japanese-own companies (such as Nissan and Toyota) are also changing the organizational hierarchy and probably the "pay" structure in the organizations. Many U.S. corporations are also reducing the number of levels in their hierarchy. This trend may have significant impacts on CEOs' pay, because CEOs' compensation is directly related to the number of levels in the organization (Mahoney, 1979). More and more people in the U.S. may adopt the "egalitarian philosophy" which implies a belief that all workers should be treated equally and fairly regarding the pay structure (Milkovich & Newman, 1990).

It is speculated that since all participants are given instructions concerning the sex of holders of each of the positions on the survey questionnaire, that therefore, the author's interest in sex becomes transparent. The subjects may have tried not to be "sexists" and may have acted accordingly. The lack of significant findings on job incumbent's sex in the present investigation does support previous studies (e.g., Arvey et al., 1977; Rynes et al., 1989; Schwab & Grams, 1985).

There are several major additional limitations in the present research. First, because rater's sex and attitudes toward money are nonmanipulated variables, care must be taken in the interpretation of present results. Second, the participants in the present study are nursing employees and college students. They do not necessary represent members of the compensation board or shareholders in making pay-related decisions. The external validity of the present finding as related to the real world should be investigated further. Future studies may want to further examine the Matthew Effect using a large sample of male students and male employees.

Third, concerning job incumbent's sex, no significant main effect is found. Due to the fact that there are only 6 positions in Figure 1, therefore, the manipulation of job incumbent's sex is relatively weak.

Moreover, should position A of Figure 1 in the present study being the only male position in the female-dominated situation, or being the only female position in the male-dominated situation, a different pattern of results may appear. Therefore, the sex for the top position, or different positions in the organizational hierarchy needs to be explored systematically in the future.

A different salary figure (reference point) for Position B may also create different patterns of results. For example, those CEOs mentioned in the present paper are making significantly more money than $20,000. In order to ask the compensation committee members, shareholders, or the general public to make more realistic judgment

of CEOs' pay, it is necessary to examine the salary figures of those who are simply one level below these CEOs.

Finally, in the present study, only three levels of employees in a hypothetical situation are examined. The highest top/bottom pay differential ratio (three levels) reported by male students with high endorsement of the Money Ethic is 2.96:1. This ratio is significantly smaller than the ratio of the highest-paid CEO/average worker (many levels) in the real world discussed earlier in the paper (5,203:1). This leads to the discussion of justice.

If the means associated with the allocation of money (procedural justice) are just, it is very difficult to question the ends (distributive justice) that have resulted. If procedural justice is determined to be unfair, then employees are very likely to retaliate against the manager and the organization by using destructive tactics to correct perceptions of "inequity" or "injustice". Employee theft, for example, may be considered as the result of reciprocal deviance or as a reaction of underpayment inequity. These destructive tactics may be harmful to the managers, the employer, and the public (Lancaster & Tang, 1989).

It appears that compensation managers need to be aware of the possible biases in their compensation decisions due to their own attitudes toward money and sex. Training programs may be employed to avoid these possible errors. Moreover, the involvement of more female managers in making compensation decisions may be an important factor to consider. Future research should examine these issues directly.

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Table 1

Means, Standard Deviations, and One-Way ANOVAs of Major Demographic Variables and the Money Ethic Scale

	Sex Groups 1	2	3	All	
Variables	M (SD)	M (SD)	M (SD)	M (SD)	Tukey
1. Age	37.03 (9.87)	28.84 (9.27)	27.22 (7.83)	32.17 (10.23)	3,2<1
2. Education	15.00 (1.53)	15.82 (1.48)	15.71 (1.36)	15.42 (1.52)	1<3,2
3. Income	24.59 (10.91)	19.18 (13.52)	18.17 (16.43)	21.48 (13.33)	
4. Money-MES	54.56 (9.65)	55.14 (7.83)	55.29 (9.61)	54.91 (9.06)	

Note. Income is expressed in 1,000. Sex Groups: 1 = Female Employees, 2 = Female Students, and 3 = Male Students. One-Way ANOVAs: Age: F (2, 199) = 23.22, p = .0001; income: F (2, 126) = 3.21, p = .04; and education: F (2, 201) = 7.06, p = .001. Money-MES F (2, 199) = .13, p = .88.

Table 2

The Means of Two-Way Interaction Effects Between Sex and MES

	Amount (1,000)			Ratio		
	Sex Groups			Sex Groups		
Variables	1	2	3	1	2	3
Position A						
High MES	34.89	37.87	39.80[a]	1.74	1.89	1.99[a]
Low MES	35.18	38.79	32.71[b]	1.76	1.94	1.64[b]
Position C						
High MES	20.06	19.24	19.14	1.00	.96	.96
Low MES	19.56	19.77	19.67	.98	.99	.98
Position D						
High MES	16.06	14.74	14.05[a]	1.27	1.42	1.49[a]
Low MES	15.31	15.54	16.24[b]	1.34	1.32	1.24[b]
Position E						
High MES	16.11	14.74	14.09[a]	1.26	1.42	1.49[a]
Low MES	15.16	15.57	16.14[b]	1.35	1.32	1.25[b]
Position G						
High MES	16.05	14.74	14.05[a]	1.27	1.42	1.49[a]
Low MES	15.03	15.57	16.24[b]	1.37	1.32	1.24[b]

Note. Sex Groups: 1 = Female Employees, 2 = Female Students, and 3 = Male Students. Ratio for Positions A and C = Position Worth/20,000. Ratio for Positions D, E, and G = 20,000/Position worth. Means not sharing a common superscript are significantly different ($p < .05$).

Table 3

The Means of Top/Bottom Pay Differentials of a Two-Way Interaction Effect Between Sex and MES

Variables	Sex Groups 1	2	3
Position A/DEG			
High MES	2.20	2.79	2.96[a]
Low MES	2.42	2.53	2.04[b]

Note. Sex Groups: 1 = Female Employees, 2 = Female Students, and 3 = Male Students. Pay Differential = A/((D + E + G)/3). Two-way interaction effect: F (2, 157) = 3.04, p = .051. Means not sharing a common superscript are significantly different ($p < .05$).

Figure 1 Hypothetical Organization Chart